

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-40. (Canceled).

41. (New) A flame retardant polymer composition comprising a polymer and a particulate filler material distributed in the polymer composition at a particle number per unit volume of at least about 1 particle per $100\ \mu\text{m}^3$ wherein the particulate filler material comprises a clay mineral that is not an organomontmorillonite.

42. (New) The composition according to claim 41, wherein the particle number per unit volume in the polymer composition is at least about 10 particles per $100\ \mu\text{m}^3$.

43. (New) The composition according to claim 41, wherein the clay mineral is chosen from a hydrous kaolin clay, a partially calcined kaolin clay and a fully calcined kaolin clay.

44. (New) The composition according to claim 41, wherein the clay mineral comprises a talc.

45. (New) The composition according to claim 41, wherein the clay mineral is chosen from a hydrous kaolin, a partially calcined kaolin, a fully calcined kaolin, a talc, and mixtures thereof.

46. (New) The composition according to claim 43, wherein the clay mineral has a mean equivalent particle diameter less than or equal to about 4 μm and a particle shape factor which is greater than about 10.

47. (New) The composition according to claim 46, wherein the mean equivalent particle diameter is less than or equal to about 3 μm .

48. (New) The composition according to claim 46, wherein the mean equivalent particle diameter ranges from about 0.1 to about 2 μm .

49. (New) The composition according to claim 46, wherein the mean equivalent particle diameter ranges from about 0.5 to about 2 μm .

50. (New) The composition according to claim 46, wherein the mean equivalent particle diameter ranges from about 0.5 to about 1.5 μm .

51. (New) The composition according to claim 46, wherein the shape factor ranges from about 10 to about 150.

52. (New) The composition according to 46, wherein the shape factor is greater than about 30.

53. (New) The compositions according to claim 46, wherein the shape factor is less than about 150.

54. (New) The composition according to claim 41, further comprising at least one flame retardant component.

55. (New) The composition according to claim 41, further comprising at least one non-kaolin flame retardant component.

56. (New) The composition according to claim 54, wherein the at least one flame retardant component is chosen from phosphorous-containing compounds, boron-

containing compounds, metal salts, metal oxides, metal hydroxides and hydrates thereof, organoclays, and halogenated hydrocarbons.

57. (New) The composition according to claim 56, wherein the organoclays are chosen from ion-exchange and other modified organoclays.

58. (New) The composition according to claim 56, wherein the at least one flame retardant component is chosen from alumina trihydrate, boric acid, and a metal borate.

59. (New) The composition according to claim 41, wherein the clay mineral is present in an amount of at least about 50% of the total weight of the composition.

60. (New) The composition according to claim 41, wherein the polymer comprises a thermoplastic polymer.

61. (New) The composition according to claim 41, wherein the polymer comprises a thermoset polymer.

62. (New) The composition according to claim 41, wherein the polymer is chosen from polyolefins, polycarbonates, polystyrenes, polyesters, acrylonitrile-butadiene-styrene copolymers, nylons, polyurethanes, and ethylene-vinyl acetates.

63. (New) The composition according to claim 62, wherein the polyolefins comprise polyethylene or polypropylene.

64. (New) The composition according to claim 41, further comprising a silane.

65. (New) An article comprising the flame retardant polymer composition according to claim 41.

66. (New) A sheath for an electrical product comprising the flame retardant polymer composition according to claim 41.

67. (New) A flame retardant polymer composition comprising a polymer and a particulate kaolin clay having a mean equivalent particle diameter less than or equal to about 4 μm and a particle shape factor greater than about 10.

68. (New) The composition according to claim 67, wherein the mean equivalent particle diameter is less than or equal to about 3 μm .

69. (New) The composition according to claim 67, wherein the mean equivalent particle diameter ranges from about 0.1 to about 2 μm .

70. (New) The composition according to claim 67, wherein the mean equivalent particle diameter ranges from about 0.5 to about 2 μm .

71. (New) The composition according to claim 67, wherein the mean equivalent particle diameter ranges from 0.5 to about 1.5 μm .

72. (New) The composition according to claim 67, wherein the shape factor ranges from about 10 to about 150.

73. (New) The composition according to 67, wherein the shape factor is greater than about 30.

74. (New) The compositions according to claim 67, wherein the shape factor is less than about 150.

75. (New) The composition according to claim 67, further comprising at least one flame retardant component.

76. (New) The composition according to claim 67, further comprising at least one non-kaolin flame retardant component.

77. (New) The composition according to claim 75, wherein the at least one flame retardant component is chosen from phosphorous-containing compounds, boron-containing compounds, metal salts, metal oxides, metal hydroxides and hydrates thereof, organoclays, and halogenated hydrocarbons.

78. (New) The composition according to claim 77, wherein the organoclays are chosen from ion-exchanged and other modified organoclays.

79. (New) The composition according to claim 77, wherein the at least one flame retardant component is chosen from alumina trihydrate, boric acid, and a metal borate.

80. (New) The composition according to claim 67, wherein the particulate kaolin clay is present in an amount of at least about 50% of the total weight of the composition.

81. (New) The composition according to claim 67, wherein the polymer comprises a thermoplastic polymer.

82. (New) The composition according to claim 67, wherein the polymer comprises a thermoset polymer.

83. (New) The composition according to claim 67, wherein the polymer is chosen from polyolefins, polycarbonates, polystyrenes, polyesters, acrylonitrile-butadiene-styrene copolymers, nylons, polyurethanes, and ethylene-vinyl acetates.

84. (New) The composition according to claim 83, wherein the polyolefins comprise polyethylene or polypropylene.

85. (New) The composition according to claim 67, further comprising a silane.

86. (New) An article comprising the flame retardant polymer composition according to claim 67.

87. (New) A sheath for an electrical product comprising the flame retardant polymer composition according to claim 67.

88. (New) A particulate filler material for a flame retardant polymer composition comprising at least one particulate non-kaolin flame retardant component and at least one clay mineral comprising a particulate kaolin clay, the particulate kaolin clay having a mean equivalent particle diameter less than or equal to about 4 μm and a particle shape factor greater than about 10.

89. (New) The filler material according to claim 88, wherein the shape factor is greater than about 30.

90. (New) The filler material according to claim 88, wherein the at least one non-kaolin flame retardant component is chosen from phosphorous-containing compounds, boron-containing compounds, metal salts, metal oxides, metal hydroxides and hydrates thereof, organoclays, and halogenated hydrocarbons.

91. (New) The filler material according to claim 90, wherein the organoclays are chosen from ion-exchanged and other modified organoclays.

92. (New) The filler material according to claim 90, wherein the metal hydrates comprise alumina trihydrate, with less than about 10% by weight of other components, and said filler material optionally further comprises at least one other non-kaolin flame retardant component.

93. (New) The filler material according to claim 88, wherein the particulate kaolin clay is chosen from a hydrous kaolin, a partially calcined kaolin, and a fully calcined kaolin.

94. (New) The filler material according to claim 88, wherein the at least one clay mineral further comprises a talc.

95. (New) The filler material according to claim 88, wherein the at least one non-kaolin clay has a mean equivalent particle diameter less than or equal to about 4 μm and a particle shape factor which is greater than about 10.

96. (New) The filler material according to claim 88, wherein the mean equivalent particle diameter is less than or equal to about 3 μm .

97. (New) The filler material according to claim 88, wherein the mean equivalent particle diameter ranges from about 0.1 to about 2 μm .

98. (New) The filler material according to claim 88, wherein the mean equivalent particle diameter ranges from about 0.5 to about 2 μm .

99. (New) The filler material according to claim 88, wherein the mean equivalent particle diameter ranges from about 0.5 to about 1.5 μm .

100. (New) The filler material according to claim 88, wherein the shape factor ranges from about 10 to about 150.

101. (New) The filler material according to claim 88, wherein the shape factor is greater than about 30.

102. (New) The filler material according to claim 88, further comprising at least one polymer or precursor thereof in a form chosen from liquid and particulate solid.

103. (New) An article comprising the particulate filler material according to claim 88.

104. (New) A sheath for an electrical product comprising the particulate filler material according to claim 88.

105. (New) A particulate filler material for a flame retardant polymer composition comprising at least one particulate non-clay mineral flame retardant component and at least one particulate non-kaolin clay mineral, wherein the non-kaolin clay mineral has a mean equivalent particle diameter less than or equal to about 4 μm and a particle shape factor which is greater than about 10.

106. (New) The filler material according to claim 105, wherein the at least one non-clay mineral component is chosen from phosphorous-containing compounds, boron-containing compounds, metal salts, metal hydroxides, metal oxides and hydrates thereof, and halogenated hydrocarbons.

107. (New) The filler material according to claim 106, wherein the metal hydrates comprise alumina trihydrate, with less than about 10% by weight of other components, and said filler material optionally further comprises at least one other particulate non-clay mineral flame retardant component.

108. (New) The filler material according to claim 105, wherein the at least one particulate non-kaolin clay mineral comprises a talc.

109. (New) The filler material according to claim 105, further comprising an organoclay.

110. The filler material according to claim 105, further comprising at least one polymer or precursor thereof in a form chosen from liquid and particulate solid.

111. (New) An article comprising the particulate filler material according to claim 104.

112. (New) A sheath for an electrical product comprising the particulate filler material according to claim 104.

113. (New) A method for forming a flame retardant polymer composition comprising (1) mixing at least one polymer and at least one particulate filler material comprising a particulate clay mineral and (2) distributing in the polymer, the particulate filler material in a particle number per unit volume of at least about 1 particle per 100 μm^3 wherein the clay mineral is not an organomontmorillonite.